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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,901	10/01/2003	Bradley L. Grunden	1152-014A	8077

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EXAMINER

MATZEK, MATTHEW D

ART UNIT PAPER NUMBER

1771

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/676,901	Applicant(s) GRUNDEN ET AL.	
	Examiner Matthew D. Matzek	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 20-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/21/2006 has been entered.

***Response to Amendment***

2. The Declaration filed on 11/13/2006 under 37 CFR 1.131 is sufficient to overcome the Yeager et al. (US 2001/0053820) reference. Therefore, all previously applied rejections made in view of the Yeager et al. reference have been withdrawn. Claims 1-22 are currently pending but claims 20-22 have been withdrawn from consideration. Claim 1 has been amended and contains no new matter. The previously applied art rejections made in view of Dzenis et al. and Follensbee et al. have been withdrawn due to their lack of teaching the instantly claimed electrical resistivities. The previously applied rejection of claim 8 over Majumdar et al. in view of Nakajima et al. has been withdrawn due to no particle size being taught by Nakajima et al.

***Claim Rejections - 35 USC § 112***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to Examiner if the concentration percentages given are directed to the pretreatment or are the concentrations present in the final product.

*Claim Rejections - 35 USC § 102*

4. Claims 1-4, 6, 7, and 13-16 are rejected under 35 U.S.C. 102(b) as anticipated by Majumdar et al. (US 6,025,119) hereinafter "Majumdar".

Majumdar et al. disclose an imaging element, which includes a support, an image-forming layer superposed on the support, and an electrically conductive layer superposed on the support (Abstract). The support layer of the applied article may comprise a wide variety of materials including paper (col. 6, lines 63-67). The protective overcoat layer, which is transparent, includes polyurethane (thermoset) binder (col. 3, lines 66-67). The transparency of the protective coating is necessitated by its use as a protective coating for an imaging element. The electrically conductive layer may be formed with conductive polymers such as polypyrrole, polyaniline, thiophene (polyethylene dioxythiophene polystyrene sulfonated), and polyisothianaphene (col. 10, lines 23-36, col. 12, lines 31-36). It is preferred that the conductive polymers are dispersed in aqueous systems (col. 10, lines 35-37). The antistatic layer more preferably possesses an electrical resistivity of less than  $10 \log$  ohms/square ( $<10^{10}$  ohms) (col. 6, lines 25-30). This limitation anticipates the instantly claimed point-to-point resistance range. Claim 16 is rejected as the weight of the electrically conductive polymer (component B) range between less than 1% and approximately 15 weight percent of the thermosetting polymer resin present in the structure (component C) (col. 11, lines 39-53).

***Claim Rejections - 35 USC § 103***

5. Claims 1-3, 5-8, 12 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannady, Jr. et al. (US 4,480,001) hereinafter "Cannady" in view of Ashlock et al. (US 4,500,669) hereinafter "Ashlock".

a. Cannady teaches a static dissipating laminate comprising a multiple layers of fibrous material impregnated with resin and metal salt to provide an antistatic effect to the laminate (Abstract). Example E comprises a Kraft paper core that is impregnated with phenolic resin. Tables 1 and 2 show that the applied invention has the instantly claimed resistance. Claim 5 is met by the fact that the conductive metal salts are added to the article at levels of from about 0.15% to 10% by weight of the thermosetting resin (col. 4, lines 39-45). The static dissipating laminate may further comprise an overlay sheet and a decorative layer (col. 3, lines 13-26). The overlay sheet may comprise melamine-formaldehyde (col. 3, lines 13-17). The disclosure of Cannady fails to teach the size of the conductive material to be incorporated into the phenolic resin.

b. Ashlock teaches the creation of a transparent, abrasion resistant coating composition of water-insoluble dispersant metals, alloys or salts thereof (Abstract). The coating composition has improved elongation and static dissipating capabilities (col. 1, lines 40-44). The static dissipating particles should have a size of 10 nanometers or less and may be antimony tin oxide or metal salts (col. 2, lines 25-36).

c. Since Cannady and Ashlock are from the same field of endeavor (i.e. static dissipative articles), the purpose disclosed by Ashlock would have been recognized in the pertinent art of Cannady.

- d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Cannady with the static dissipating particles of Ashlock with the motivation of improving the static dissipating properties (col. 2, lines 35-36, Ashlock) of the laminate.
6. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannady, Jr. et al. (US 4,480,001) in view of Ashlock et al. (US 4,500,669) as applied to claim 1 above, and further in view of Lindsay et al. (US 4,208,696) hereinafter "Lindsay". The disclosures of Cannady and Ashlock are silent as to the incorporation of an electrically conductive web into their respective static dissipative laminates.
- a. Lindsay teaches an electrically conductive web for safely and quickly discharging static electricity. The web comprises a semi-conductive polymeric surface layer, which is in electrical contact with a conductive foraminous (scrim) layer. The composite structure may be bonded to a suitable supporting substrate (Abstract).
- b. Since Cannady and Lindsay are from the same field of endeavor (i.e. static dissipative articles), the purpose disclosed by Lindsay would have been recognized in the pertinent art of Cannady.
- c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have added a conductive scrim to the invention of Cannady. The structure of Cannady is the same as Lindsay (overlay/decorative=semi-conductive layer; core=support layer), except that Lindsay has the additional conductive scrim layer between the semi-conductive and support layers. One of ordinary skill would have been motivated to incorporate the conductive scrim into the article of Cannady by the desire to

prevent build-up of static charge as well as the rapid and safe discharge of accumulated static electricity (col. 1, lines 55-57, Lindsay). Claim 11 is rejected as the scrim is located between the overlay and core layers in the combined inventions. The overlay sheet is preferably a thin fibrous cellulosic sheet impregnated with a thermosetting resin (col. 3, lines 13-17) and the impregnating resin contains conductive metal salt (col. 4, lines 31-35). The disclosure of Lindsay only mentions the use of a conductive woven scrim, however it would have been obvious to one of ordinary skill in the art to have substituted a conductive nonwoven scrim or the woven scrim as it is well known that woven and nonwoven scrims are interchangeable.

***Response to Arguments***

7. Applicant's arguments filed 9/21/2006 have been fully considered but they are not persuasive.

8. Applicant argues that the rejections made in view of Majumdar should be withdrawn as Majumdar allegedly teaches that relative humidity of from 5-50% is required. Examiner believes that Applicant has misinterpreted the applied patent. In the cited section of Majumdar, the reference mentions the relative humidity present when the electrical resistivity measurements were taken, not the relative humidity levels necessary to acquire the recited resistivities. Furthermore, the applied reference clearly states that the electrical conductivity/resistivity of the antistatic layer is independent of relative humidity (col. 2, lines 30-37).

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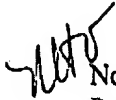
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mdm

  
Norca L. Torres-Velazquez  
Primary Examiner  
Art Unit 1771

12/9/06